

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Currently Amended) A balancing device of a raising-lowering window arranged in a movable shoji opened and closed in the vertical direction, and holding a dynamic balancing relation with the weight of the movable shoji and resting the movable shoji in an arbitrary position and facilitating the opening and closing operations,

wherein said balancing device ~~is constructed by~~ comprises a balancing force adjusting device, a balancing force generator, a slide body₁ and a spiral rod₂[[;]] ,

wherein the balancing force adjusting device is fixedly arranged in ~~the~~ an upper portion position of a longitudinal frame and ~~is constructed by~~ comprises a case, a horizontal gear member, a click member₁ and a vertical gear member,

wherein the horizontal gear member is rotatably arranged around ~~the~~ a horizontal axis in a predetermined position within ~~this~~ the case and a gear is formed on ~~the~~ a side of a head portion of the horizontal gear member, and a ratchet gear is formed around ~~[[a]]~~ an intermediate shaft portion of the horizontal gear member, and a screwdriver engaging portion is formed on ~~a shaft~~ an end face of the horizontal gear member facing the case exterior,

wherein the click member is rotatably arranged in a predetermined angular range around ~~the~~ a horizontal axis in a position adjacent to said horizontal gear member, and a screwdriver engaging portion is formed on ~~a shaft~~ an end face of the click member facing the case exterior, and two clicks extending in said horizontal gear member direction are respectively arranged on ~~both the sides~~ a lower portion of ~~[[an]]~~ a click member intermediate shaft portion within the case, and one of said clicks is biasedly engaged with the ratchet gear formed ~~[[in]]~~ around the intermediate shaft portion of said horizontal gear member, and the other click is engaged with the ratchet gear when the engagement of the one click is released by a swinging operation, and

wherein the vertical gear member is rotatably arranged around ~~the~~ a vertical axis in a predetermined position within said case, and a gear around the upper face side of the vertical gear member is engaged with the gear ~~[[of]]~~ around the head portion of said horizontal gear member ~~is arranged in the upper portion of the vertical gear member~~, and a connecting shaft is arranged in ~~the~~ a lower end portion of the vertical gear member, ~~and~~ the vertical gear member ~~[[is]]~~ being dependently rotated by rotating said horizontal gear member~~[[;]]~~ .

wherein the balancing force generator ~~is constructed by~~ comprises a torsion spring storing sleeve, a torsion spring stored within the torsion spring storing sleeve, and a rotating operating body arranged in ~~the~~ a lower end portion of the torsion spring, ~~and~~ the balancing force generator ~~[[is]]~~ being connected to the vertical gear

member of said balancing force adjusting device and ~~[[is]]~~ being arranged in a vertical arrangement, and at least the torsion spring ~~[[is]]~~ being rotated and operated around ~~the~~ a vertical axis by an adjusting operation in the balancing force adjusting device so that balancing force can be introduced and adjusted with respect to the torsion spring and an upper direction force balancing with the movable shoji ~~[[is]]~~ being given by said torsion spring at the opening and closing times of the movable shoji~~[[;]]~~ .

wherein the slide body is fixedly arranged in a lower end side portion of said movable shoji, and is raised and lowered as the movable shoji is vertically moved~~[[;]]~~ . and

wherein ~~the~~ a lower end of the spiral rod is fixed to ~~this~~ the slide body, and ~~the tip portion~~ an upper end of the spiral rod extends through the rotating operating body of said balancing force generator and is inserted into the torsion spring storing sleeve, and the spiral rod performs winding and unwinding operations of the torsion spring by giving rotating force around ~~the~~ a vertical axis to said rotating operating body as said movable shoji is vertically moved.

2. (Currently Amended) A balancing device of a raising-lowering window arranged in a movable shoji opened and closed in the vertical direction, and holding a dynamic balancing relation with the weight of the movable shoji and resting the

movable shoji in an arbitrary position and facilitating the opening and closing operations,

wherein said balancing device comprises balancing means for giving an upper direction force balancing with said movable shoji by a torsion spring, slide means attached to a side portion lower end of the movable shoji and guiding the movable shoji along a longitudinal frame while guiding the movable shoji, a spiral rod for operating ~~this~~ the slide means and said balancing means in cooperation with each other and performing winding and unwinding operations of the torsion spring of said balancing means as the slide means is moved, and adjusting means of said torsion spring assembled into said slide means[[:]] .

wherein said torsion spring adjusting means is constructed by a ratchet shaft member and a click member[[:]] .

wherein the ratchet shaft member is rotatably arranged around ~~the~~ a vertical axis in a predetermined position, and a connecting portion connected to said spiral rod is arranged in ~~the~~ an upper end portion of the ratchet shaft member, and a ratchet gear is formed around a shaft portion of the ratchet shaft member, and a screwdriver engaging portion is formed on a ~~shaft~~ lower end face of the ratchet shaft member facing the exterior, and

wherein the click member is rotatably arranged in a predetermined angular range around ~~the~~ a vertical axis in a position adjacent to said ratchet shaft member, and a screwdriver engaging portion is formed on a ~~shaft~~ lower end face of the click

member facing the exterior, and two clicks extending in said ratchet shaft member direction are respectively arranged on ~~both the sides~~ either side of ~~[[an]] a click member~~ intermediate shaft portion, and one of said clicks is biasedly engaged with the ratchet gear formed ~~[[in]]~~ around said ratchet shaft member, and the other click is engaged with the ratchet gear when the engagement of the one click is released by a swinging operation.

3. (Canceled)

4. (New) A balancing device for a shoji to counterbalance the weight of the shoji, comprising:

a balancing force adjusting device connected to the shoji and having a case, a horizontal gear member, a ratchet member, and a vertical gear member; and

a balancing force generator for applying force to counterbalance the shoji, said force being adjustable by a torque applied by said balancing force adjusting device;

said horizontal gear member being rotatably arranged within the case and having a horizontal gear member gear, a ratchet gear, and an first exposed engagement element engageable to permit rotation thereof by external force,

the ratchet member being rotatably arranged in a position adjacent to said horizontal gear member and having a second exposed engagement element engageable to permit rotation thereof by external force and at least one ratchet arm biasedly engaged with the ratchet gear to restrict rotation of the horizontal gear member in a first direction which reduces the torque applied to the balancing force generator,

the vertical gear member being rotatably arranged within said case and having a vertical gear member gear engaged with the horizontal gear member gear, and being connected to the balancing force generator to apply torque from the horizontal gear member to said balancing force generator to adjust the force applied to counterbalance the shoji, wherein

said first exposed engagement element is rotatable by an external force in a second direction opposite said first direction, to adjust torque applied to the balancing force generator, and

said second exposed engagement element is engageable to release the restricting action of the ratchet arm.

5. (New) The balancing device according to claim 4 wherein the balancing force generator comprises:

a torsion spring storing sleeve;

a torsion spring; and

a rotating operating body arranged in an end portion of the torsion spring,
at least the torsion spring being rotatable around an axis by an adjusting
operation in the balancing force adjusting device.

6. (New) The balancing device according to claim 5, further comprising:

a spiral rod connected to the shoji and extending through said rotating
operating body and inserted into said torsion spring storing sleeve, said spiral rod
performing winding and unwinding operations of the torsion spring by applying
rotating force around a vertical axis to said rotating operating body as said movable
shoji is vertically moved.

7. (New) A balancing device for a shoji to counterbalance the weight of the
shoji, comprising:

a torsion spring adjusting means having a gear member and a ratchet member,
a balancing means for applying an upper direction force to balance the weight
of the shoji and being connected to the shoji, said force being adjustable by a torque
applied by the torsion spring adjusting means,

said gear member being rotatably arranged and having a ratchet gear and a
first exposed engagement element engageable to permit rotation thereof by external
force,

said ratchet member being rotatably arranged adjacent to said gear member and having a second exposed engagement element engageable to permit rotation thereof by external force and at least one ratchet arm biasedly engaged with said ratchet gear to restrict rotation of the gear member in a first direction which reduces the torque applied to the balancing force generator, wherein

said first exposed engagement element is rotatable by an external force in a second direction opposite said first direction, to adjust torque applied to the balancing force generator, and

said second exposed engagement element is engageable to release the restricting action of the ratchet arm.

8. (New) A balancing device according to claim 7 further comprising:

slide means attached to said shoji; and

a spiral rod connected to said slide means,

the balancing means having a torsion spring,

the torsion spring adjusting means being assembled into said slide means, and

said gear member being rotatably arranged connected to said spiral rod.

9. (New) A balancing device according to claim 4, wherein the at least one ratchet arm includes a first and a second ratchet arm, the first ratchet arm being biasedly engaged with the ratchet gear to restrict rotation of the horizontal gear

member in said first direction which reduces the torque applied to the balancing force generator, and the second ratchet arm being engaged with the ratchet gear to restrict the rotation of the horizontal gear in said first direction when the restrictive action of the first ratchet arm is released.

10. (New) A balancing device according to claim 7, wherein the at least one ratchet arm includes a first and a second ratchet arm, the first ratchet arm being biasedly engaged with the ratchet gear to restrict rotation of the gear member in said first direction which reduces the torque applied to the balancing means, and the second ratchet arm being engaged with the ratchet gear to restrict the rotation of the gear member in said first direction when the restrictive action of the first ratchet arm is released.

11. (New) A balancing device according to claim 4, wherein said first and second exposed engagement elements are engageable by a screwdriver.

12. (New) A balancing device according to claim 7, wherein said first and second exposed engagement elements are engageable by a screwdriver.